

# caArray version 1.0

Interfaces  
for document based and programmatic  
data access and data exchange

Document:

- caArray web portal
- MAGE-ML import/export

Programmatic:

- MAGE-OM API (access)
- EJB API (exchange)

# Web Portal

## **Data access/data exchange:**

- Submit experiment annotations in the caArray data base:
  - Data annotation forms
  - MAGE-ML import
- Export experiment annotations: MAGE-ML export
- Upload/download GenePix and Affymetrix data files
- Upload of additional files related to your experiment (e.g. images, analysis results) on the ftp server. These files will be available for download only.  
Note: caArray v1.0 will not support submission of processed data or data analysis results in the database.

## **Potential users:**

- Scientists

## **Skills/knowledge required:**

- Knowledge of the research area in question
- Knowledge of microarray technology
- Familiarity with MIAME and MGED ontology will help.

MIAME compliant submission of experiments into the database is required for all downstream processing of data.

# MAGE-ML import/export

- caArray version 1.0: import and export of experiment annotations in MAGE-ML format.
- To upload or download original data files, you will use the caArray web portal or the EJB API.
- **Potential users:**  
Scientist (or anyone else) who needs to transfer experiment annotations from one system/server to another:
  - from caArray 1 to caArray 2
  - from MIAMExpress to caArray
- **Required skills/knowledge:**  
No specific skills required?
- **Pre-condition :**  
Experiment has been correctly and completely annotated using a MIAME 1.1 compliant system (caArray, MIAMExpress).

# MAGE-OM API

- Provides access to data, both annotations and measurements.
- **Potential users:**  
Software developers for microarray data analysis tools.
- **Required skills/knowledge:**  
J2EE/MAGE-OM
- **Example Queries:**  
All Affymetrix hybridizations on breast tissue  
All Affymetrix hybridizations on breast Adenocarcinoma.

## **Pre-condition:**

Submission of MIAME1.1 compliant experiment annotations and data files in the caArray database via the web portal, or the EJB API.

# EJB API

via data transfer objects

Experiments, Protocols, Vocabularies, Security Objects

## **Use cases:**

- Download/upload Affymetrix and GenePix native data files.
- MAGE-ML import/export
- Download/upload protocols
- Set up / modify data access

## **Potential Users:**

Developers who want to transfer data files or other information from one (caArray) system to another.

## **Required skills/knowledge:**

J2EE/MAGE-OM